MERCER

Investment Consulting

February 17, 2006

Total Fund Review – Fourth Quarter Board Meeting
Arizona State Retirement System

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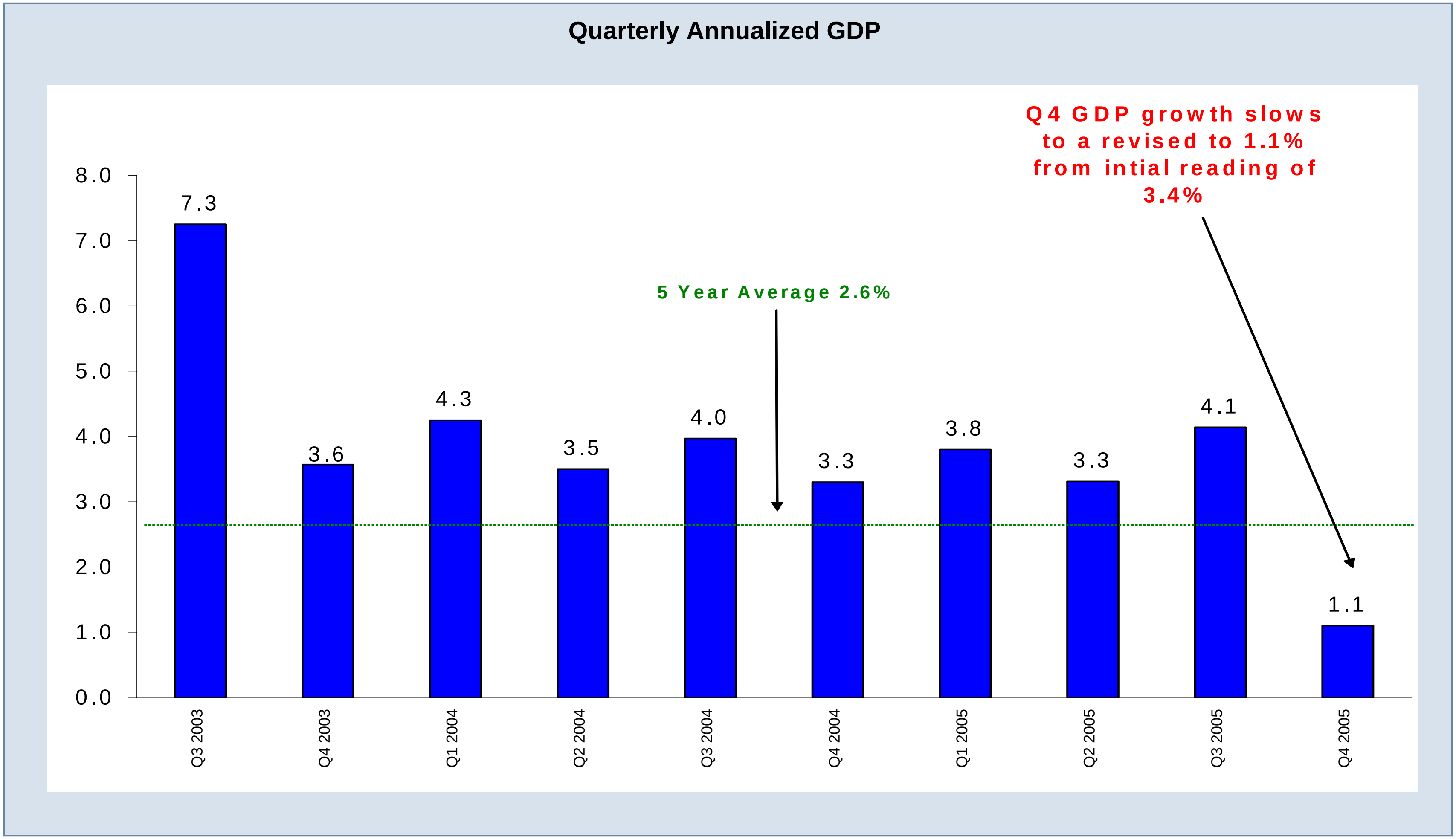
Economic Environment

Economic Growth Was Steady In 2005
A Drop In 4th Quarter GDP Raises Questions About 2006

- Economic growth slowed in the 4th quarter, raising the debate whether higher interest rates, higher energy costs and a cooling housing market will hurt the economy in 2006.
- Some economists blame the decrease in economic growth on the lack of consumer spending in the 4th quarter, which is expected to reverse in 2006. Others see economic growth slowing to 2002 levels.
- Crude oil prices finished the year near $60 per barrel, after spiking to over $70 per barrel in early September, in the wake of Hurricane Katrina.
- Resiliency of the economy, recent declines in prices at the pump, and job growth caused consumer confidence to bounce back following the late summer hurricanes.

Economic Growth Was Steady In 2005
A Drop In 4th Quarter GDP Raises Questions About 2006



Economic Growth Was Steady In 2005
A Drop In 4th Quarter GDP Raises Questions About 2006

- Inflation increases at the wholesale level and domestic savings rate turns negative
  - Wholesale prices rose 5.4% for 2005, up from a 4.1% increase in 2004. This was the biggest increase since a 5.7% increase in 1990, the year of surging oil costs. However, core inflation, excluding energy and food, was up a more moderate 2.2% in 2005.
  - U.S. consumers spent roughly $39 billion more than they earned in 2005; the last time spending outpaced earnings was in 1933.
- The civilian unemployment rate dropped 0.5% for year and finished around 4.9%, a small improvement in the second half of 2005 from 5.1%.

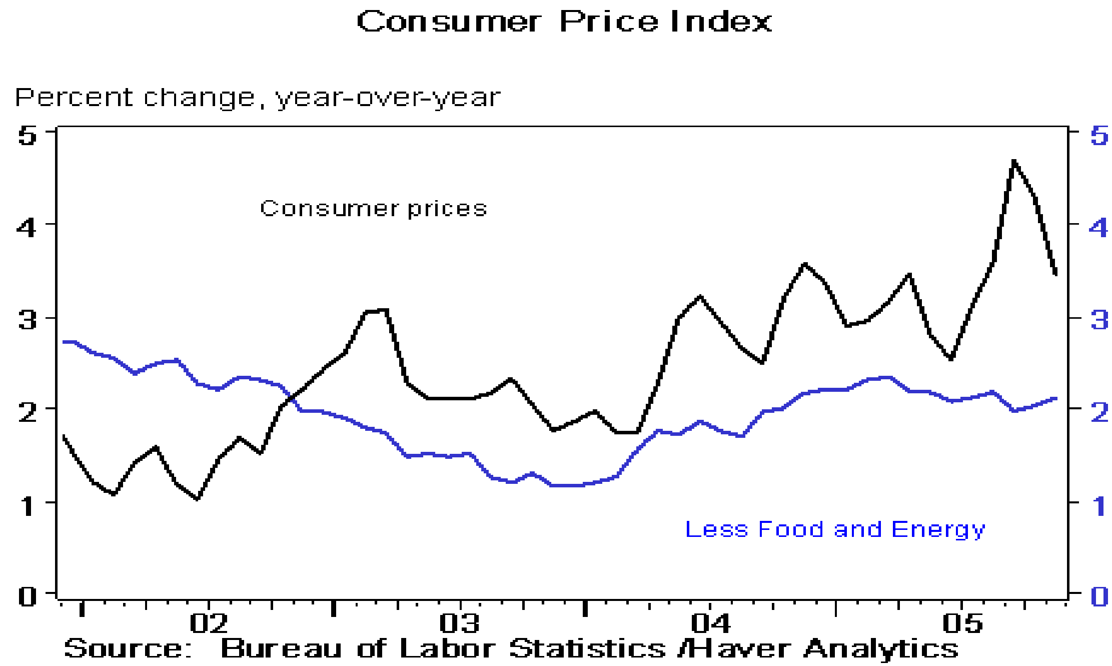
Energy Price-Driven Inflation Retreats

- With energy prices retreating across the board after the Hurricanes, the overall price level actually dropped during the quarter.

	2004			2005			
	2Q	3Q	4Q	1Q	2Q	3Q	4Q
Quarter Change	1.2%	0.1%	0.2%	1.6%	0.6%	2.2%	-0.4%
Year-over-Year Change	3.3%	2.5%	3.3%	3.1%	2.5%	4.7%	3.4%

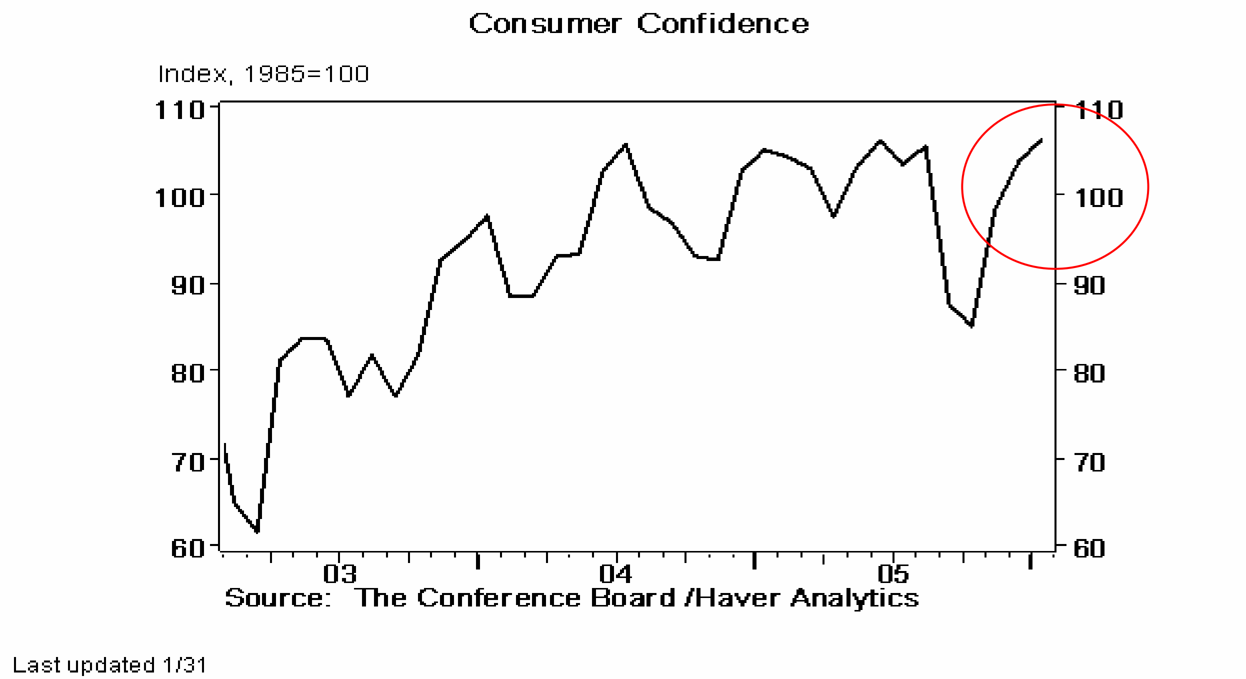
- Core CPI is more stable and increased for the quarter by 0.4% and by 2.2% for the year.
- Breakeven inflation decreased during the quarter. In September, the breakeven inflation as measured by the difference between 10-year nominal and real yields was at 2.6%, but fell to 2.3% by the end of December. During January, it has rebounded back up to 2.5%.
- Going forward, we continue to affirm 2.5% as our estimate of inflation for the next year as well as the long run. In the short run, with the recent revival of oil prices, we should see slightly higher overall inflation for this quarter.

Energy Price-Driven Inflation Retreats
Core Inflation Continues to be Moderate



Last updated 12/15

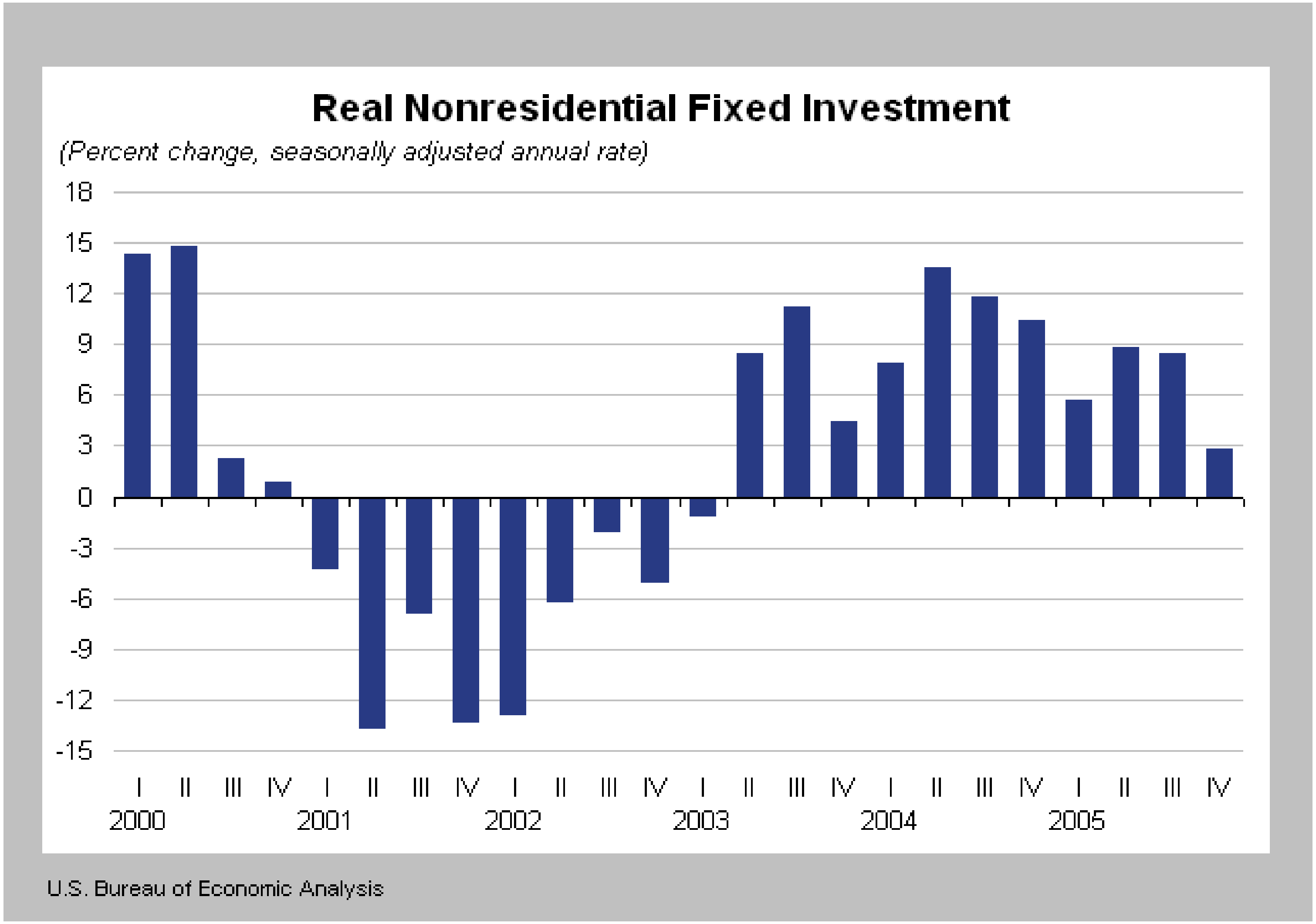
Consumer Confidence Rebounds



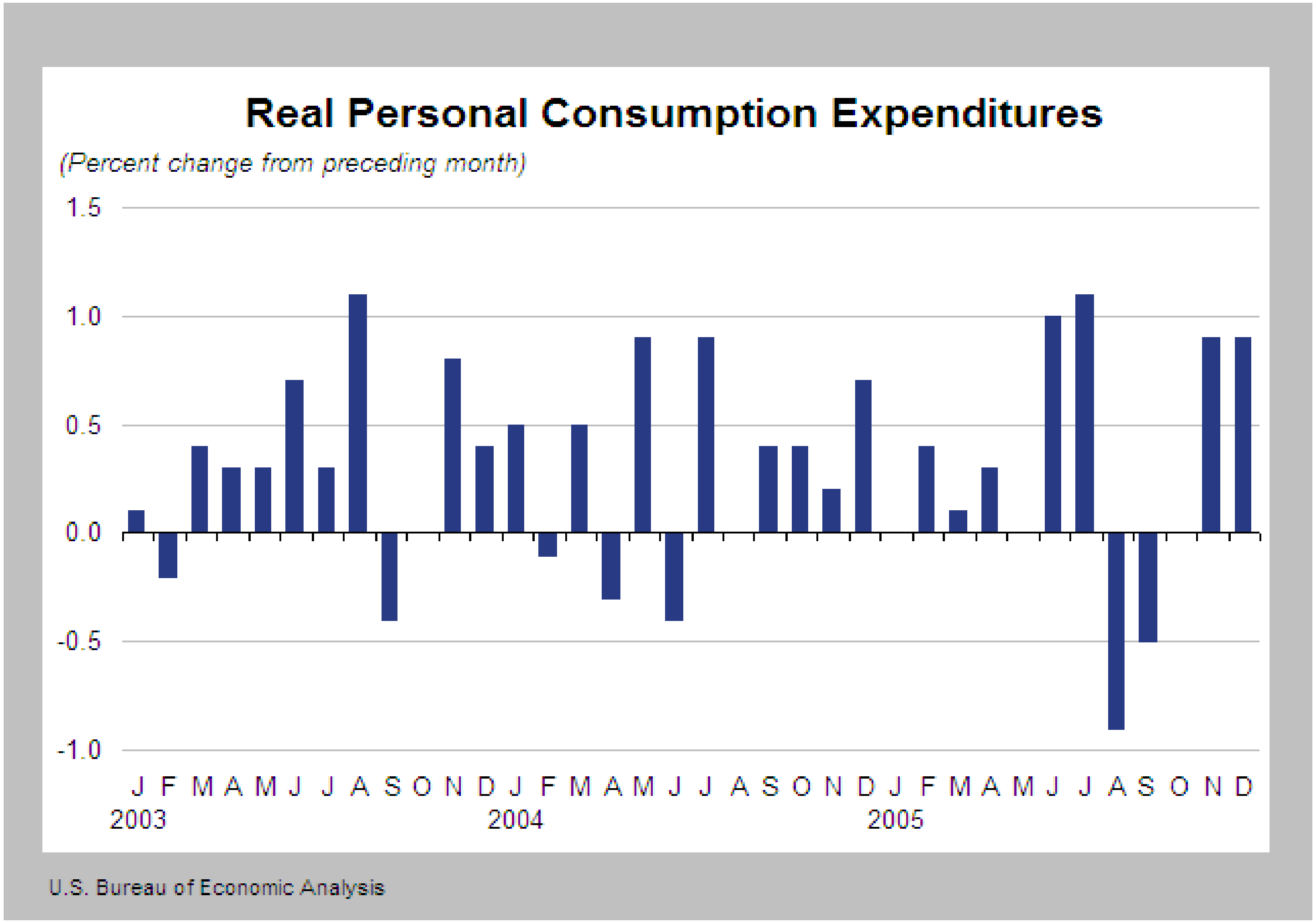
Unemployment Continued Its Downward Trend

Note: Cross-hatched area represents recession.

Corporate Capital Spending Weakens Slightly



Consumer Spending Rebounds Dramatically
Reflects Improvement in Consumer Sentiment



There are Some Concerns

- **The Federal Budget Deficit.** Overall, the budget deficit is large in nominal terms, but in relative terms, it's nowhere near the worst cases over the last 35 years. Currently, the deficit is projected to run about 3.2% of the economy. The huge deficit of two years ago (over 4%) was not as bad as the deficits of 1992, the mid 1980s, or 1974.
  - The deficit is highly sensitive to the economy. On average since 1959, during expansions, government receipts grow at over 8.0%, while expenditures grow at 7.1%, so the deficit shrinks. During recessions, receipts are flat, but expenditures increase to 9.9%.
  - Although things look "OK" in the short run in the budget deficit, there are long term problems. Social security and especially Medicare and Medicaid are expected to cause far larger deficits starting in a few years.

There are Some Concerns

- **The Trade Deficit.** With the trade deficit approaching 6.0% of GDP, most economies have had severe shocks to them and seen sudden depreciation of their currencies. However, the US dollar defies conventional wisdom and in fact has appreciated over the last year.
  - We are in an odd equilibrium. In return for our buying goods from the rest of the world (mostly China), they buy our treasury bonds. This helps keep interest rates low, which promotes consumption here in the US and keeps our demand for foreign goods high.
    - Many analysts think that this equilibrium can go on for quite awhile, though the end of the decade. Ideally, China and India will move from a savings phase and start a consumption phase, in which they will start to demand more and more US goods.

There are Some Concerns

- **Promises That Are Going To Be Hard To Keep.** On a global basis, financial promises have been made, for retirement and health care in particular, that are increasingly difficult to meet.
- Promises are for future benefits for which insufficient funding is set aside
- As these promises are redeemed in the futures, these become obligations of future taxpayers.
- As “Today is Yesterday’s Tomorrow”, the current funding of these previous promises is becoming increasing visible and burdensome.
- The burden of these past promises is becoming a political issue around the world.

Outside the US: Global Growth

- Economic growth outside the US appears to be positive. Europe is reviving slowly, Japan is in its best shape in over a decade, and the emerging markets are booming.
- The global economy is no longer powered by the single engine, the U.S. Consumer. Economic growth is now on a stronger base
  - Just in time, too!
- The dollar has finally started to weaken again. After a neutral quarter, the dollar is down against practically every currency in January.

Securities Markets

U.S. Equity Markets
Fourth Quarter Performance Leaves US equities with Modest Gains for 2005

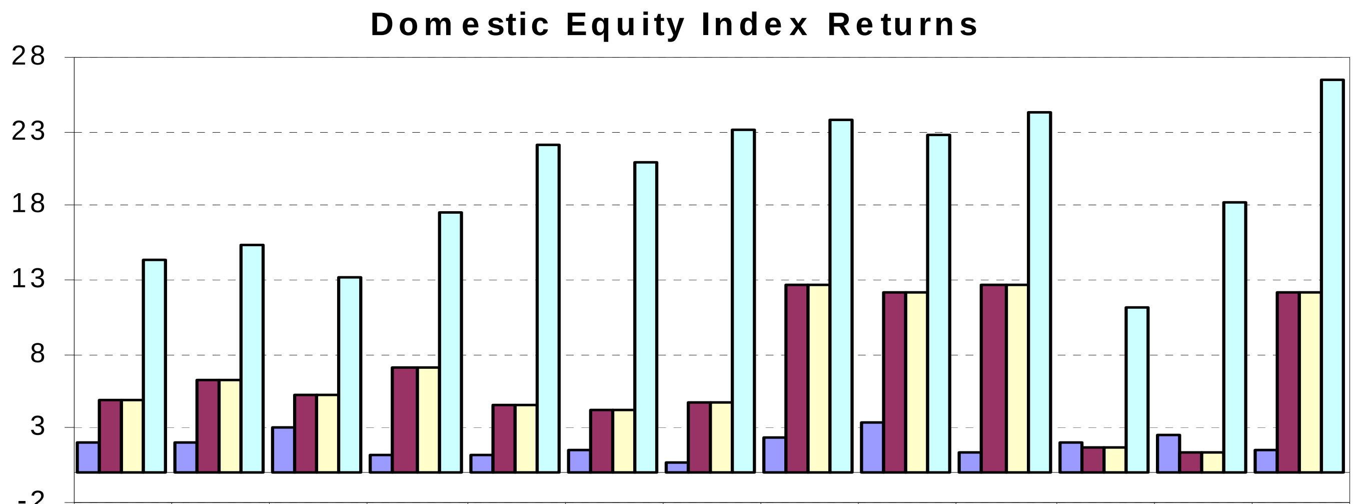
- Despite economic and corporate growth that steadily outpaced forecasts, domestic equities failed to surge during the fourth quarter as they had in previous years.
- The S&P 500 Index finished the fourth quarter up a modest 2.1% and gained 4.9% for the year. The S&P 500 price-to-earnings ratio ended 2005 at 18, lower than the past few years.
- Energy and utilities soared in 2005, gaining 29.1% and 12.8% respectively; however, for the 4th quarter energy dropped -7.7% and utilities dropped -6.3%.
- Consumer discretionary and telecom were the worst performing sectors.

U.S. Equity Markets
Fourth Quarter Performance Leaves US equities with Modest Gains for 2005

- Mid caps lead performance, while small caps fall behind large caps
- The Russell Mid-cap index gained 12.7% for 2005, while the Russell 2000 (small caps) posted a 4.5% return and Russell 1000 (large caps) posted a 6.3% return.
- Among large caps, value stocks outpaced growth stocks for the sixth consecutive year.

U.S. Equity Markets
Index Performance

Domestic Equity Returns



	S&P 500	Russell 1000	Russell 1000 Growth	Russell 1000 Value	Russell 2000	Russell 2000 Growth	Russell 2000 Value	Russell Mid	Russell Mid Growth	Russell Mid Value	DJIA	Nasdaq	NAREIT
Quarter	2.09	2.12	2.98	1.27	1.13	1.61	0.66	2.35	3.44	1.34	2.06	2.49	1.54
YTD	4.91	6.27	5.26	7.05	4.55	4.15	4.71	12.65	12.10	12.65	1.72	1.37	12.16
1 Year	4.91	6.27	5.26	7.05	4.55	4.15	4.71	12.65	12.10	12.65	1.72	1.37	12.16
3 Year	14.39	15.42	13.23	17.49	22.13	20.93	23.18	23.79	22.70	24.38	11.18	18.20	26.49

Quarterly Returns Are Single-Digit Positive

- Growth is outperforming value across the cap ranges.
- Mid cap growth was the best place to invest.

4Q05	Growth	Core	Value
Large	**2.98**	**2.12**	**1.27**
Mid	**3.44**	**2.35**	**1.34**
Small	**1.61**	**1.13**	**0.66**
Note: Russell 1000, Mid-Cap, 2000 Indices: Growth, Core, Value			

One-Year Returns Differ Significantly by Style

- Very strong results for mid-cap across the style spectrum.
- Value was generally the place to be, but that is changing.

1-Year Returns	**Growth**	**Core**	**Value**
Large	**5.26**	**6.27**	**7.05**
Mid	**12.10**	**12.65**	**12.65**
Small	**4.15**	**4.55**	**4.71**
Note: Russell 1000, Mid-Cap, 2000 Indices: Growth, Core, Value			

Three-Year Results Show Narrowing Variations

- Returns, for all asset classes, are well above long-term expectations.
- Even large growth has improved dramatically.

3-Year Returns	Growth	Core	Value
Large	13.23	15.42	17.49
Mid	22.70	23.79	24.38
Small	20.93	22.13	23.18
Note: Russell 1000, Mid-Cap, 2000 Indices: Growth, Core, Value			

Cumulative 3-Year Results Are Strong

- Returns for all are excellent; we had an excellent recovery.
- Mid-cap is up around 90% across the style spectrum.

Cumulative 3-Yr	**Growth**	**Core**	**Value**
Large	**45.17**	**53.76**	**62.18**
Mid	**84.73**	**89.70**	**92.42**
Small	**76.85**	**82.17**	**86.90**
Note: Russell 1000, Mid-Cap, 2000 Indices: Value, Core, Growth			

Five-Year Results Still Show Wide Variations

- Returns are positive for most asset classes.
  - Large cap growth is still slightly negative.
- Value, particularly small value, is superior to other styles.

5-Year Returns	Growth	Core	Value
Large	-3.58	1.07	5.28
Mid	1.37	8.46	12.21
Small	2.28	8.22	13.55
Note: Russell 1000, Mid-Cap, 2000 Indices: Growth, Core, Value			

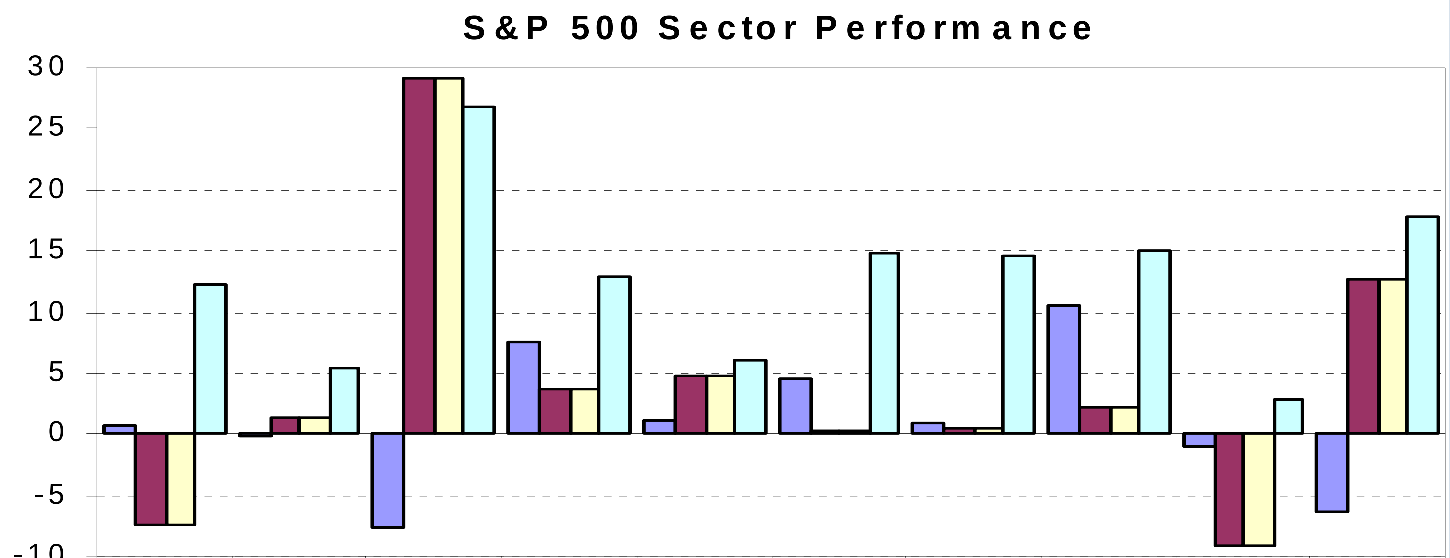
Cumulative 5-Year Results Are Extremely Different, Depending on Market Segment

- Large growth stocks lost more than 16% of their value.
  - This has been steadily improving.
- Small value stocks increased by more than 100%!

Cumulative 5-Yr	**Growth**	**Core**	**Value**
Large	**-16.66**	**5.47**	**29.34**
Mid	**7.04**	**50.09**	**77.89**
Small	**11.93**	**48.44**	**88.77**
Note: Russell 1000, Mid-Cap, 2000 Indices: Value, Core, Growth			

U.S. Equity Markets
Sector Performance

S&P 500 Returns by Sector



	Cons. Discr.	Cons. Stpls.	Energy	Financl.	Health Care	Industrials	Tech.	Materials	Telecom	Utilities
Quarter	0.77	-0.12	-7.73	7.49	1.02	4.47	0.92	10.56	-1.10	-6.32
YTD	-7.35	1.34	29.14	3.72	4.85	0.36	0.38	2.15	-9.05	12.75
1 Year	-7.35	1.34	29.14	3.72	4.85	0.36	0.38	2.15	-9.05	12.75
3 Year	12.24	5.48	26.73	12.82	6.00	14.72	14.54	15.11	2.90	17.76

Source: Datastream

U.S. Equity Markets
Top Positive and Negative Contributors

S&P 500 Fourth Quarter Return: 2.09%

25 Largest Positive Contributors

Stock	Return (%)	End of Quarter Weight	Rank
JPMORGAN CHASE & CO	18.06%	1.23%	12
BANK OF AMERICA CORP	10.81%	1.65%	6
CITIGROUP INC	7.58%	2.18%	3
GENERAL ELECTRIC CO	4.84%	3.29%	1
AMERICAN INTL GROUP INC	10.37%	1.57%	8
APPLE COMPUTER INC	34.10%	0.54%	41
MERCK & CO INC	18.42%	0.62%	33
WACHOVIA CORP	12.13%	0.73%	26
UNITEDHEALTH GROUP INC	10.57%	0.75%	22
WELLS FARGO & CO	8.16%	0.93%	17
WAL-MART STORES INC	7.14%	1.04%	15
SCHLUMBERGER LTD	15.38%	0.51%	45
STARBUCKS CORP	19.80%	0.20%	115
UNITED PARCEL SERVICE INC	9.17%	0.74%	25
YAHOO INC	15.78%	0.44%	56
FREDDIE MAC	16.58%	0.40%	62
MERRILL LYNCH & CO INC	10.73%	0.55%	37
HOME DEPOT INC	6.39%	0.76%	21
FEDEX CORP	18.75%	0.28%	85
MEDTRONIC INC	7.55%	0.62%	32
WASHINGTON MUTUAL INC	12.29%	0.38%	65
ALCOA INC	21.75%	0.23%	102
MICROSOFT CORP	1.93%	2.13%	4
UNITED TECHNOLOGIES CORP	8.29%	0.51%	46
PEPSICO INC	4.64%	0.87%	18

25 Largest Negative Contributors

Stock	Return (%)	End of Quarter Weight	Rank
EXXON MOBIL CORP	-11.16%	3.10%	2
CHEVRON CORP	-11.61%	1.13%	14
CONOCOPHILLIPS	-16.38%	0.72%	29
PFIZER INC	-5.77%	1.53%	9
DELL INC	-12.31%	0.63%	31
JOHNSON & JOHNSON	-4.52%	1.59%	7
COMCAST CORP	-11.64%	0.50%	48
AMERICAN EXPRESS CO	-10.19%	0.57%	36
GENERAL MOTORS CORP	-35.11%	0.10%	250
VERIZON COMMUNICATIONS	-6.68%	0.74%	24
VALERO ENERGY CORP	-8.53%	0.28%	82
TXU CORP	-10.34%	0.22%	106
SYMANTEC CORP	-22.77%	0.17%	138
COCA-COLA CO	-6.06%	0.74%	23
CISCO SYSTEMS INC	-4.52%	0.93%	16
PROCTER & GAMBLE CO	-2.17%	1.72%	5
ABBOTT LABORATORIES INC	-6.41%	0.54%	39
FORD MOTOR CO	-20.76%	0.13%	185
CENDANT CORP	-15.91%	0.16%	150
HALLIBURTON CO	-9.40%	0.28%	83
TEXAS INSTRUMENTS INC	-5.30%	0.46%	53
TIME WARNER INC	-3.43%	0.72%	28
DOMINION RESOURCES INC VA	-9.59%	0.24%	96
MARATHON OIL CORP	-11.06%	0.20%	124
DEVON ENERGY CORP	-8.78%	0.25%	94

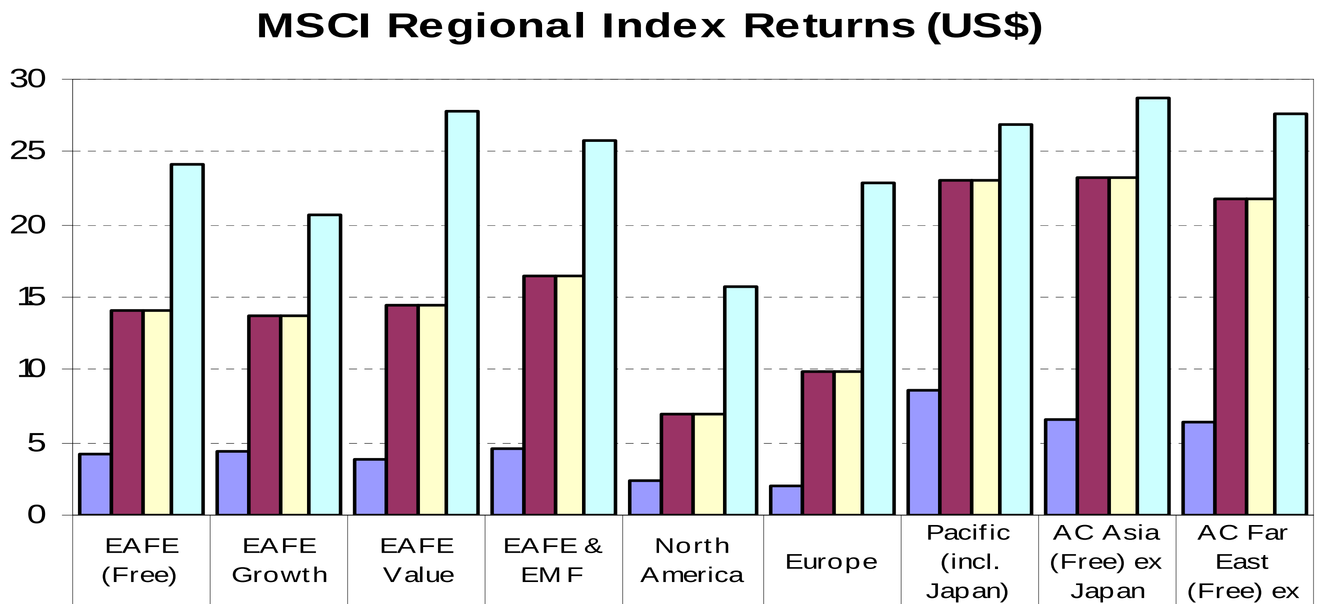
Data Source: Compustat

Report Date: January 23, 2006

Non-U.S. Equity Markets
International Markets Outperform Domestic Equities, Posting a Very Strong Year

- The MSCI EAFE Index returned 4.12% and 14.0% for the fourth quarter and 2005, respectively, following a strong performance of 20.7% in 2004.
  - Strong relative performance among international stocks was due in large part to foreign currency appreciation versus the U.S. dollar.
  - Value stocks outperformed growth stocks for the year. However, the reverse was true for the quarter, as growth stocks had a resurgence.
- The major countries of the EAFE Index (Japan, Germany, France, and Switzerland) all posted double-digit returns for the year.
- Japan posted a 11.9% return for the quarter, outpacing all other countries.

Non-U.S. Equity Markets
EAFE Regional Performance



	EAFE (Free)	EAFE Growth	EAFE Value	EAFE & EMF	North America	Europe	Pacific (incl. Japan)	AC Asia (Free) ex Japan	AC Far East (Free) ex
Quarter	4.12	4.37	3.87	4.54	2.38	1.99	8.65	6.51	6.32
YTD	14.02	13.64	14.39	16.41	6.93	9.93	23.01	23.17	21.84
1 Year	14.02	13.64	14.39	16.41	6.93	9.93	23.01	23.17	21.84
3 Year	24.18	20.59	27.76	25.70	15.69	22.91	26.82	28.69	27.59

Source: Datastream

Fixed Income Markets
Yield Curve Goes Inverted, Bonds Post Small Gains During Q4 and for the Year

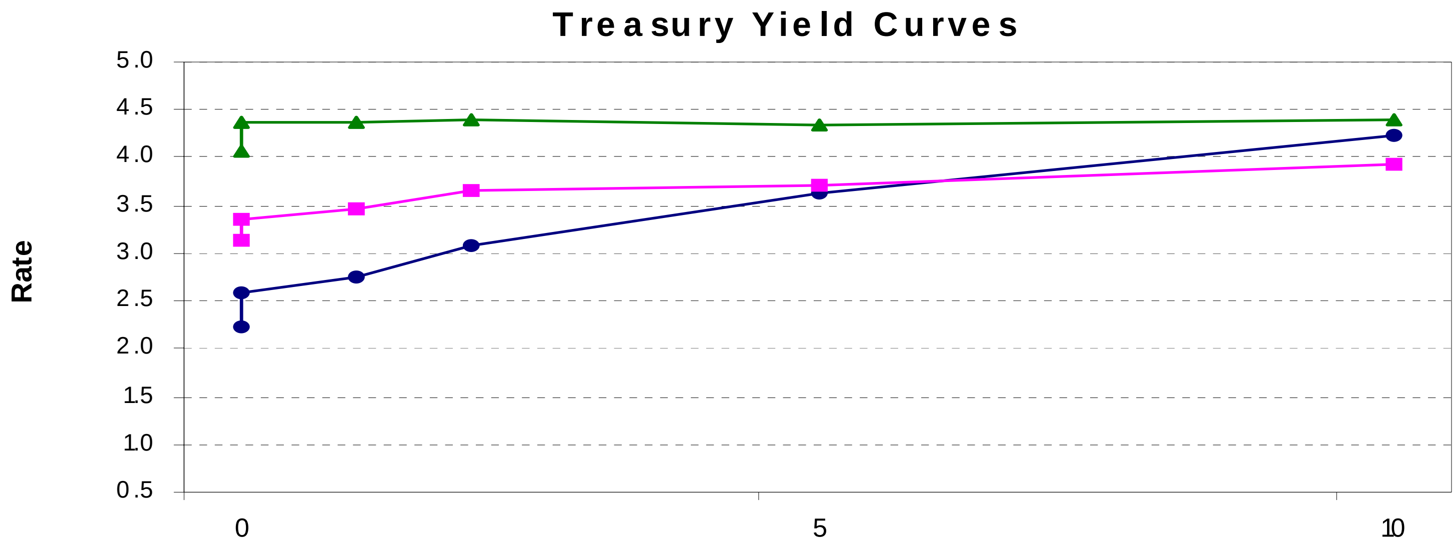
- The yield curve continued to flatten during the year and inverted late in the fourth quarter, as bond yields at the short end of the yield curve moved higher than long maturities. Investors typically want higher yields for longer-term loans. Conventional thought cites an inverted yield as a signal of an economic recession.
- Most economists believe the inversion is a result of supply and demand issues, not the a “Fed induced credit restraint”, which would occur if the dollar were to plunge and inflation to accelerate.
- The LB Aggregate Index gained 0.6% and 2.4% for Q4 and 2005, respectively.

Fixed Income Markets
Yield Curve Goes Inverted, Bonds Post Small Gains During Q4 and for the Year

- The Lehman Long Gov/Corp Long Index advanced 0.9% during the quarter and finished 2005 with a gain of 5.3%.
- U.S. Treasuries outperformed corporate issues and mortgage-backed securities during the fourth quarter and for the year.

Yield Curve Becomes Inverted
Short Rates Rise More Than Long Rates

Shifting Yield Curve

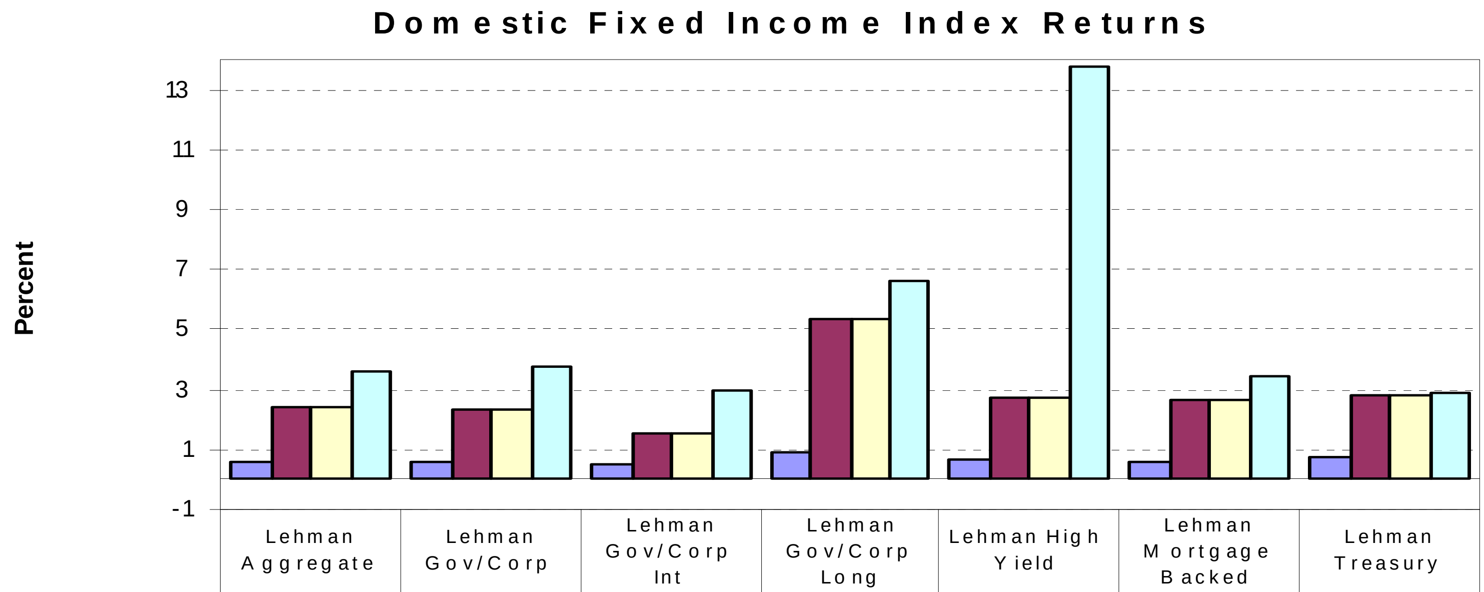


Years	0.25	0.5	1	2	5	10
Dec-04	2.22	2.59	2.75	3.08	3.63	4.24
Jun-05	3.13	3.34	3.45	3.66	3.72	3.94
Dec-05	4.08	4.37	4.38	4.41	4.35	4.39

Source: Datastream

Fixed Income Markets
Index Performance

Domestic Fixed Income Returns



	Lehman Aggregate	Lehman Gov/Corp	Lehman Gov/Corp Int	Lehman Gov/Corp Long	Lehman High Yield	Lehman Mortgage Backed	Lehman Treasury
Quarter	0.59	0.59	0.52	0.93	0.67	0.60	0.73
YTD	2.43	2.34	1.57	5.34	2.74	2.62	2.78
1 Year	2.43	2.34	1.57	5.34	2.74	2.62	2.78
3 Year	3.62	3.74	2.96	6.58	13.77	3.45	2.85

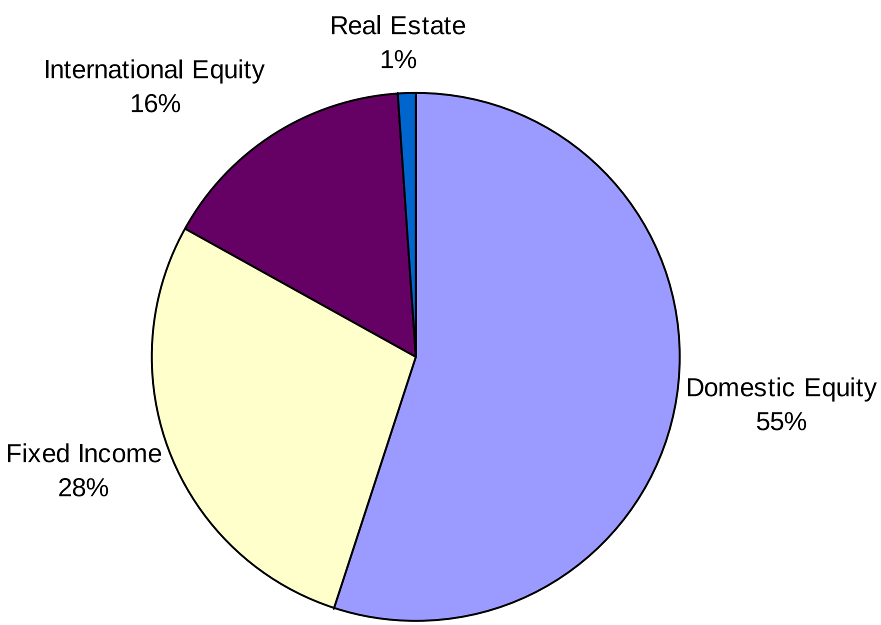
Real Estate

- REITs post solid performance, outperforming the S&P 500 for the sixth consecutive year
  - Real Estate Investment Trusts returned 12.2% during 2005, but cooled off in the fourth quarter.
  - Over the trailing five-year period, REITs have posted an annualized return of 19% versus a gain of 0.6% for the S&P 500.
  - Relative to domestic and international markets over the most recent market cycle, REITs have performed strongly in up and down markets, with lower volatility of returns.
- Investments in private real estate, as measured by the NCREIF Index, have also been quite strong, returning 4.4% during Q4, 19.2% for the year, and 11.0% over the trailing five-year period.

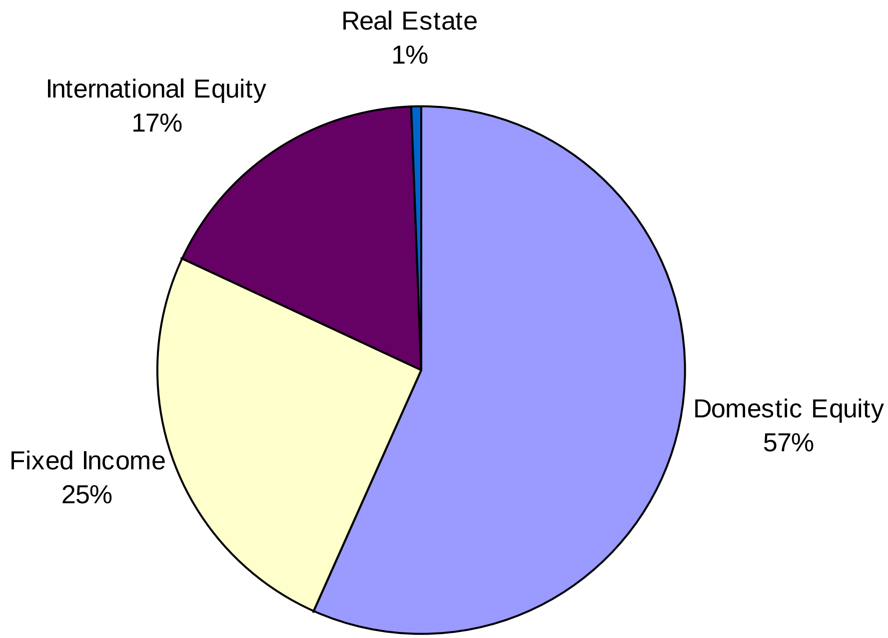
ASRS Total Fund Performance

Total Fund Asset Allocation
December 31, 2005

Policy Adjusted for Transition into Real Estate

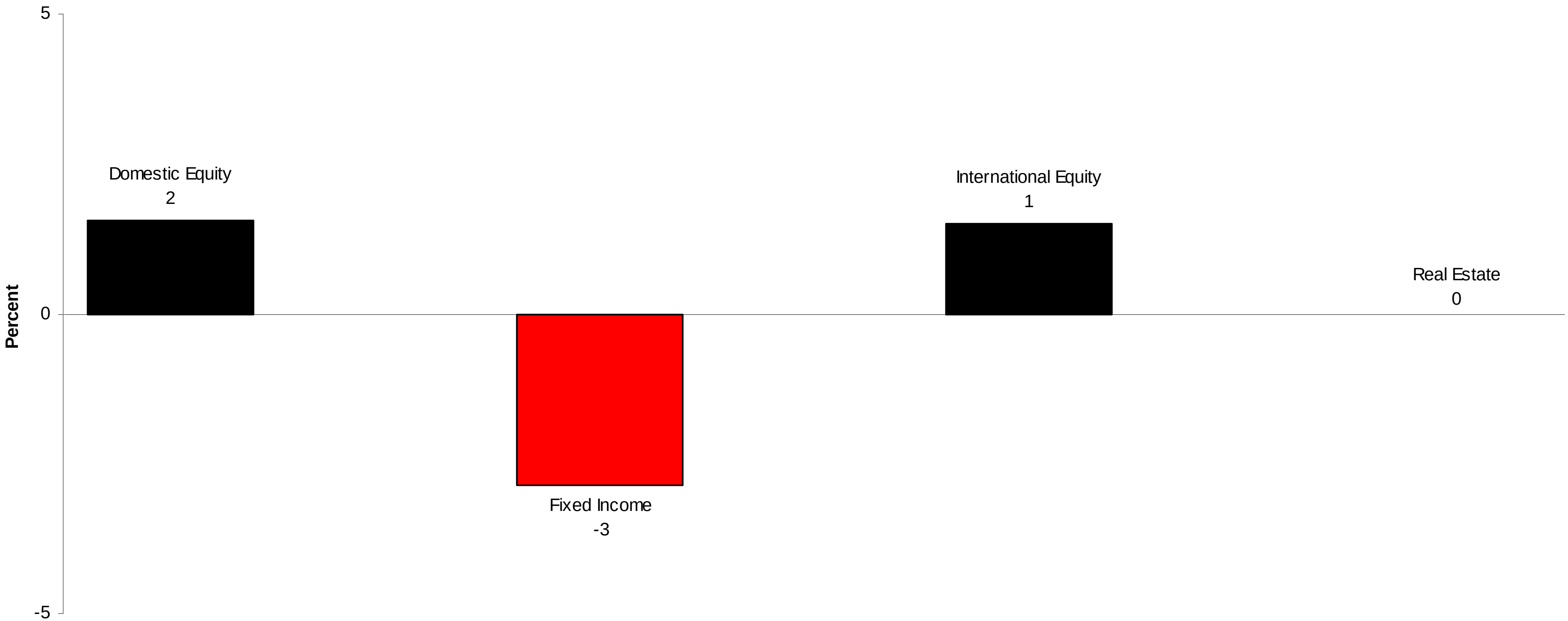


Actual Asset Allocation



Total Fund Asset Allocation
December 31, 2005

Actual Asset Allocation vs. Policy Adjusted for Transition into Real Estate



Total Fund Performance
For Periods Ending December 31, 2005

	Quarter	1 Year	3 Years	5 Years	10 Years
Total Fund	2.3%	6.5%	14.0%	4.2%	8.9%
Benchmark*	2.1	5.8	12.9	3.3	7.6
Excess Return	0.2	0.7	1.1	0.9	1.3

* Interim Benchmark of 55% S&P 500/28% LB Aggregate/16% Custom International Equity Benchmark(1)/ 1% NCREIF+1% Index, which incorporates a proration of 5% real estate.

Policy History:
- 7/1/87-12/31/91 – 60% S&P 500/40% LB Aggregate
- 1/1/92-12/31/94 – 50% S&P 500/40% LB Aggregate/10% EAFE
- 1/1/95-6/30/97 – 45% S&P 500/40% LB Aggregate/15% EAFE
- 7/1/97-12/31/99 – 50% S&P 500/35% LB Aggregate/15% EAFE
- 1/1/00-9/30/03 – 53% S&P 500/30% LB Aggregate/17% EAFE
- 10/1/03-present – 53% S&P 500/26% LB Aggregate/15% Custom International Equity Benchmark(1)/6% NCREIF+1% .

(1) Custom International Equity Benchmark is MSCI ACW ex. US Index. Prior to 10/1/05, it was MSCI EAFE Index.

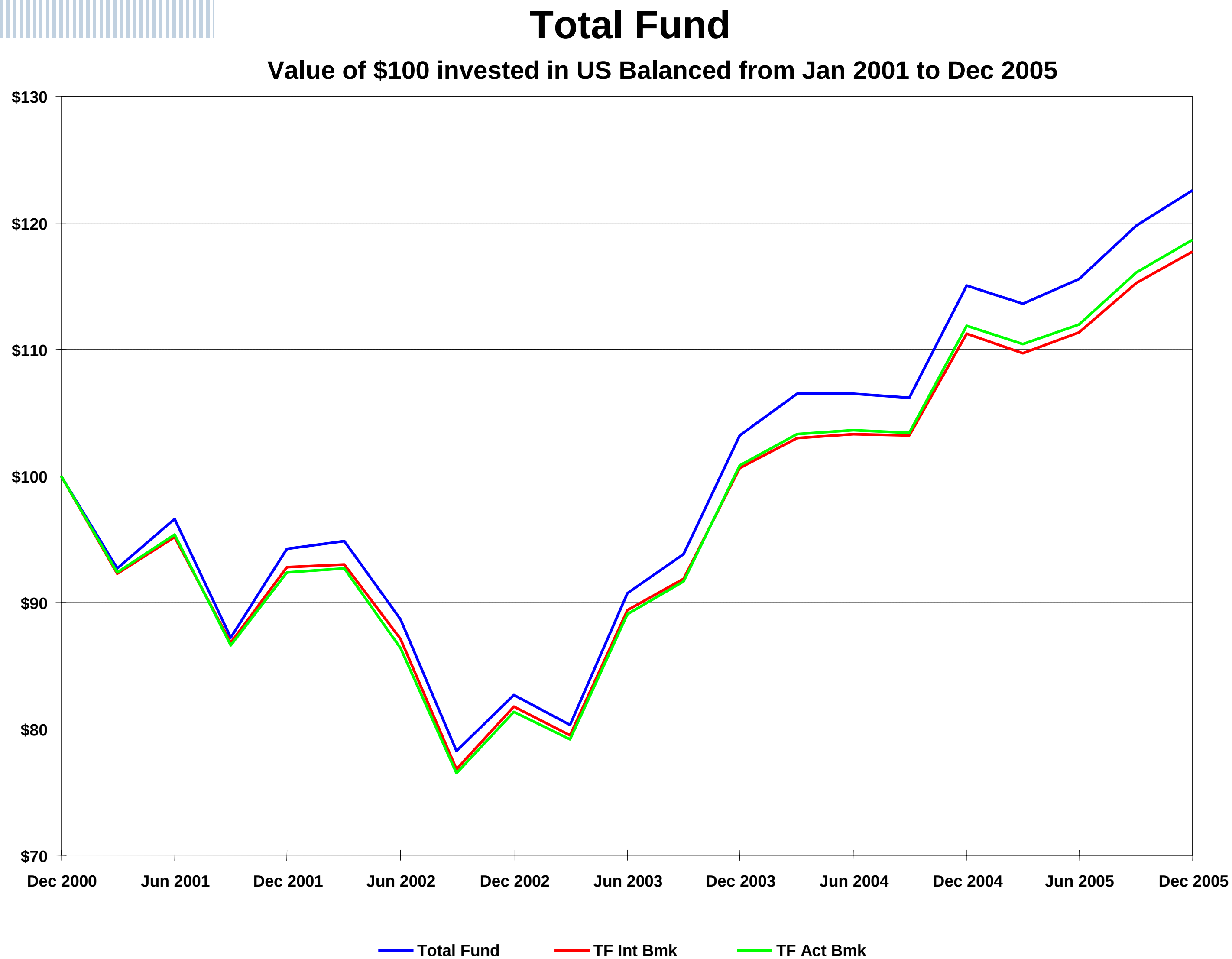
Total Fund Ranking
For Periods Ending December 31, 2005

	1 Year	3 Years	5 Years	10 Years
Russell/Mellon Trust Universes				
Master Trust Funds - Total Funds	70	50	75	52
Total Funds - Public	81	70	95	47
Total Funds Billion Dollar - Public	88	75	100	52
Total Funds - Corporate	68	49	68	50
Wilshire Trust Universe Comparison Service				
Master Trusts - All	66	44	73	65
Public Funds	66	42	83	53
Public Funds Greater than $1.0 Billion	73	46	90	54
Corporate	66	47	63	71
Callan Associates Inc.				
Total Funds	69	43	76	54
Public Funds	70	31	87	31
Public Funds - Large (>1B)	83	51	94	41
Corporate Funds	59	32	73	62

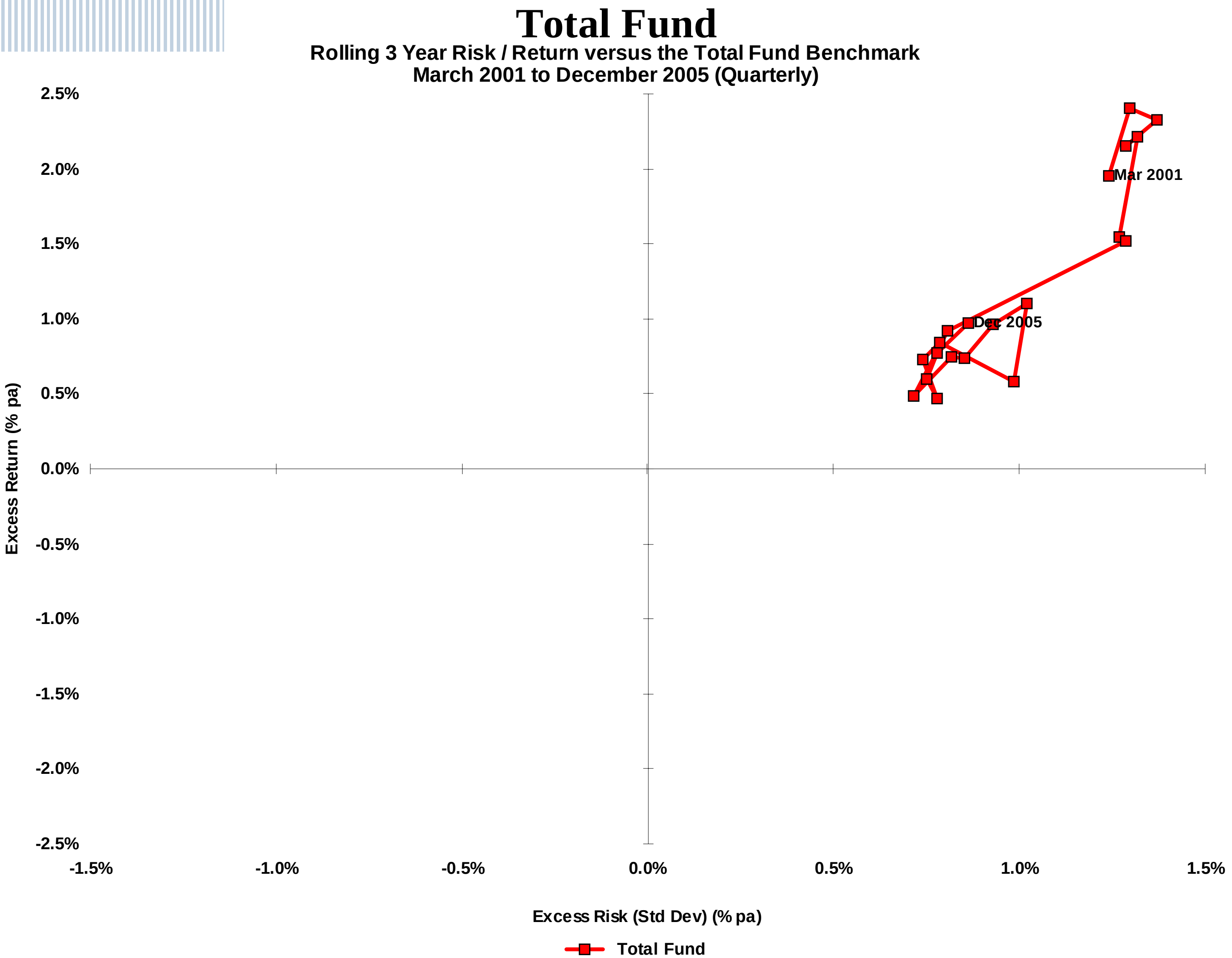
Total Fund Performance
For Periods Ending December 31, 2005

		1 Year	3 Years	5 Years	10 Years
	ASRS Total Fund	6.5%	14.0%	4.2%	8.9%
1)	Asset Allocation Target	7.4%	7.6%	7.9%	8.5%
	Excess Return	-0.9%	6.4%	-3.7%	0.4%
2)	CPI Inflation + 3.75%	7.2%	6.6%	6.3%	6.3%
	Wage Inflation + 3.75%	7.6%	6.3%	7.1%	6.7%
	Excess Return - CPI	-0.7%	7.4%	-2.1%	2.6%
	Excess Return - Wage	-1.1%	7.7%	-2.9%	2.2%
3)	Actuarial Assumption	8.0%	8.0%	8.0%	8.0%
	Excess Return	-1.5%	6.0%	-3.8%	0.9%

Total Fund Growth



Risk/Return Analysis



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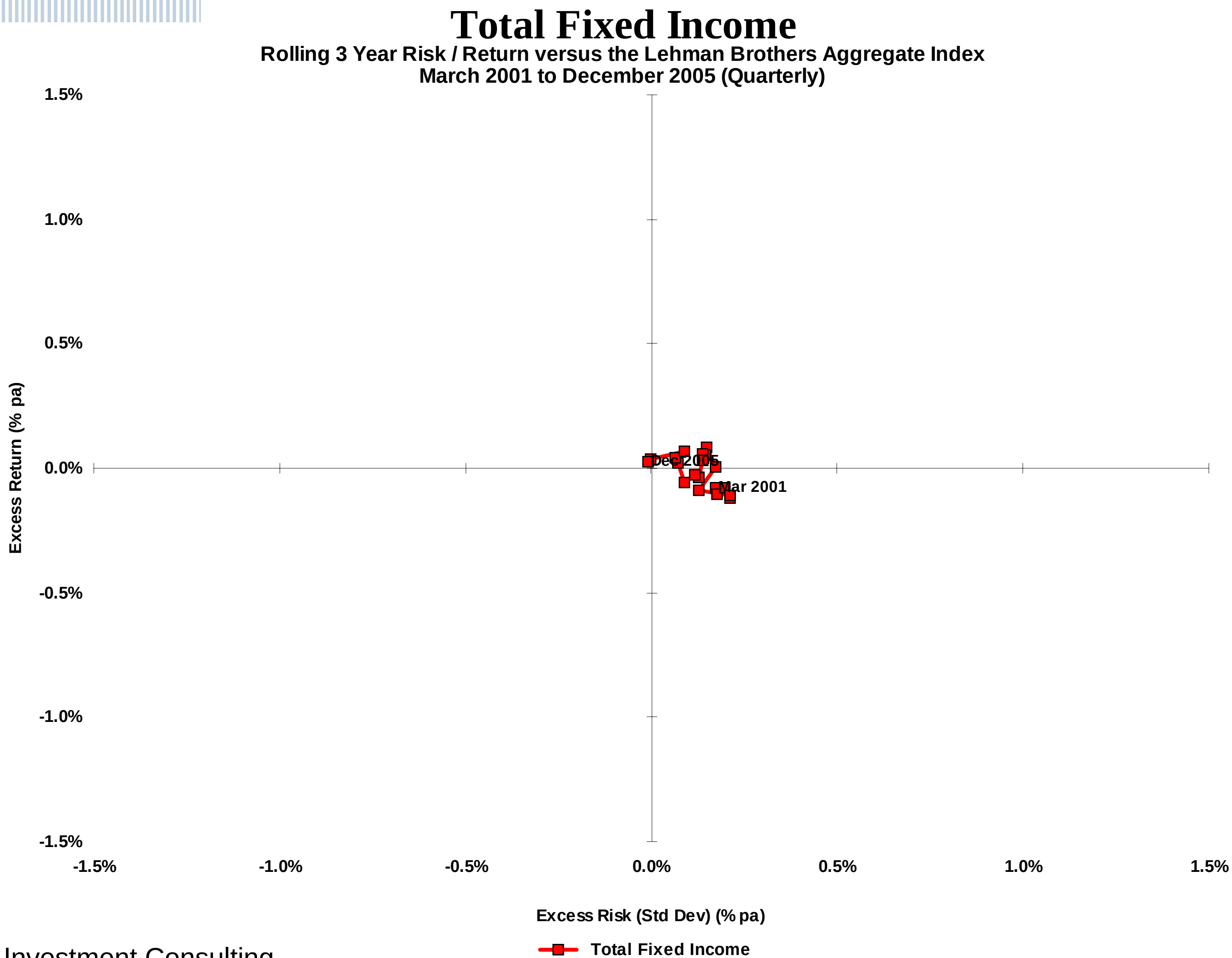
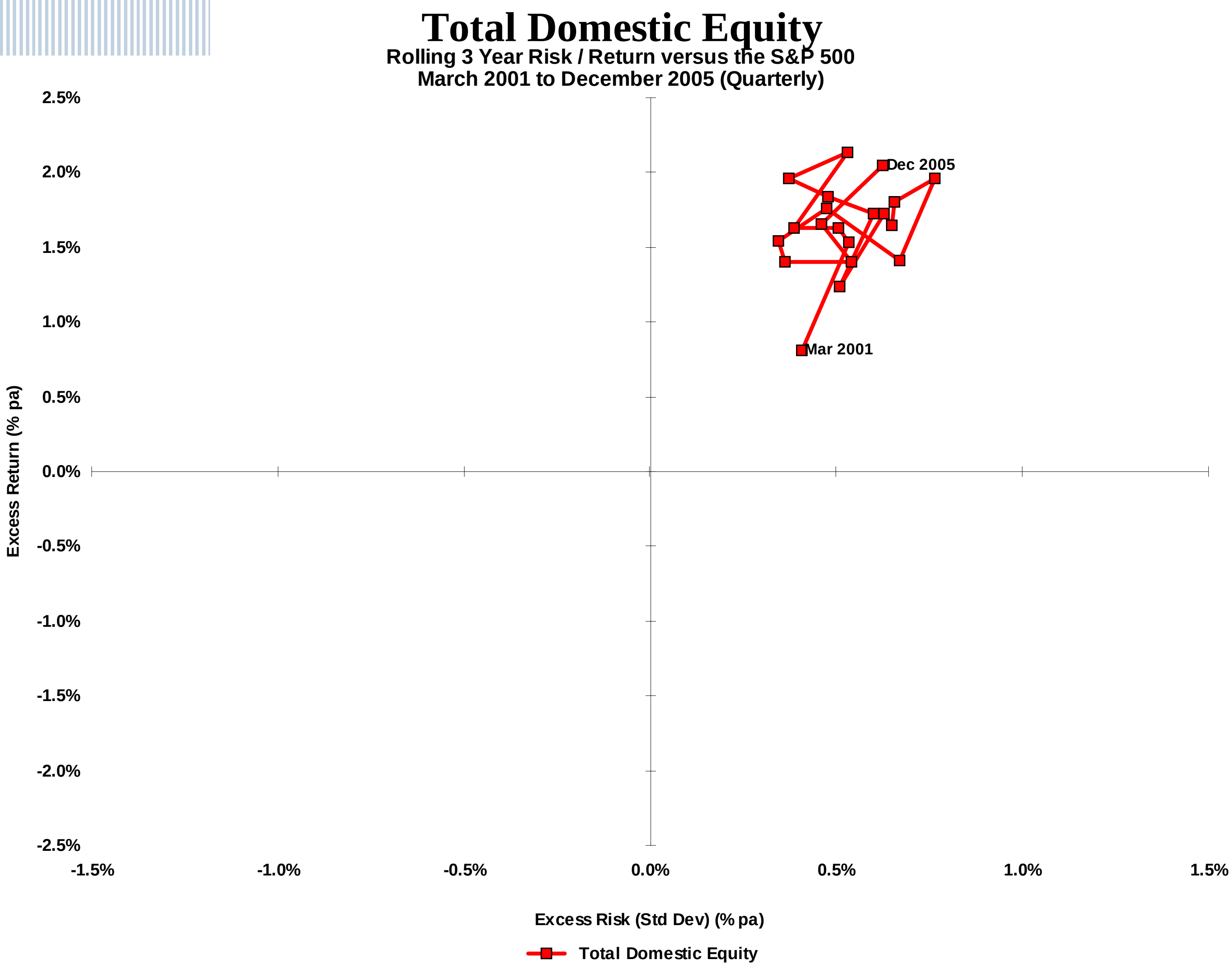
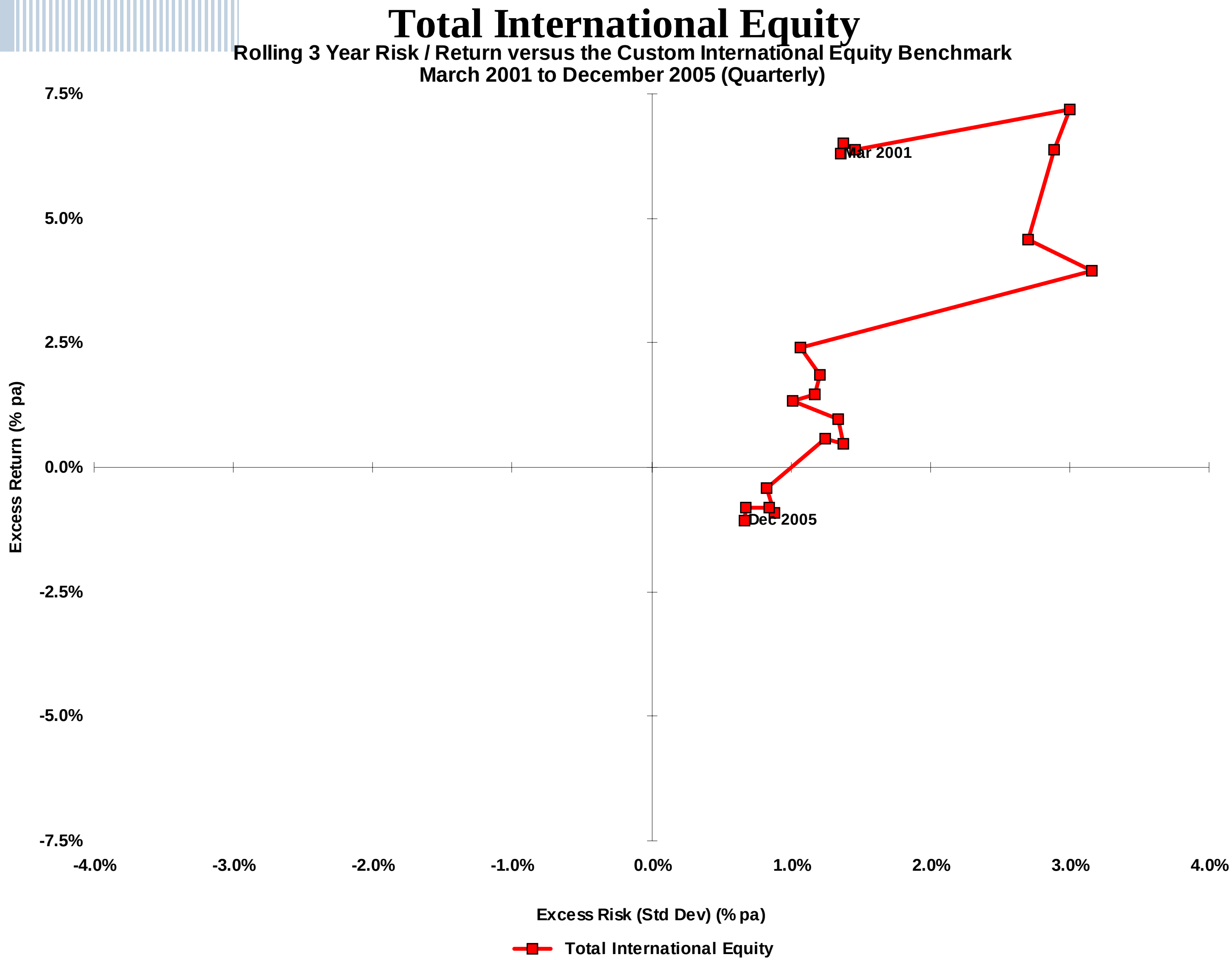


Risk/Return Analysis



Risk/Return Analysis



Performance vs. Benchmarks
For the 3 Years Ending December 31, 2005

	Return	Assumed ROR	Std. Dev.
Total Fund	14.0%	7.6%	9.6%
Benchmark*	12.9		9.1
Domestic Fixed	3.6	4.7	3.4
LB Aggregate	3.6		3.4
Domestic Equity	16.4	8.7	12.2
S&P 500	14.4		11.6
Intl. Equity	23.2	8.9	17.5
Custom Bmk	24.3		16.8
Real Estate	N/A	--	N/A

* Interim Benchmark of 55% S&P 500/28% LB Aggregate/16% Custom International Equity Benchmark / 1% NCREIF+1% Index, which incorporates a proration of 5% real estate.

Performance vs. Benchmarks
For the 5 Years Ending December 31, 2005

	Return	Assumed ROR	Std. Dev.
Total Fund	4.2%	7.9%	13.0%
Benchmark*	3.3		12.5
Domestic Fixed	5.9	5.1	3.8
LB Aggregate	5.9		3.8
Domestic Equity	2.3	9.0	18.7
S&P 500	0.5		18.2
Intl. Equity	5.1	9.3	21.0
EAFE	5.0		20.5
Real Estate	N/A	--	N/A

* Interim Benchmark of 55% S&P 500/28% LB Aggregate/16% Custom International Equity Benchmark / 1% NCREIF+1% Index, which incorporates a proration of 5% real estate.